

Stroke of Insight: Telemedicine in Hawaii

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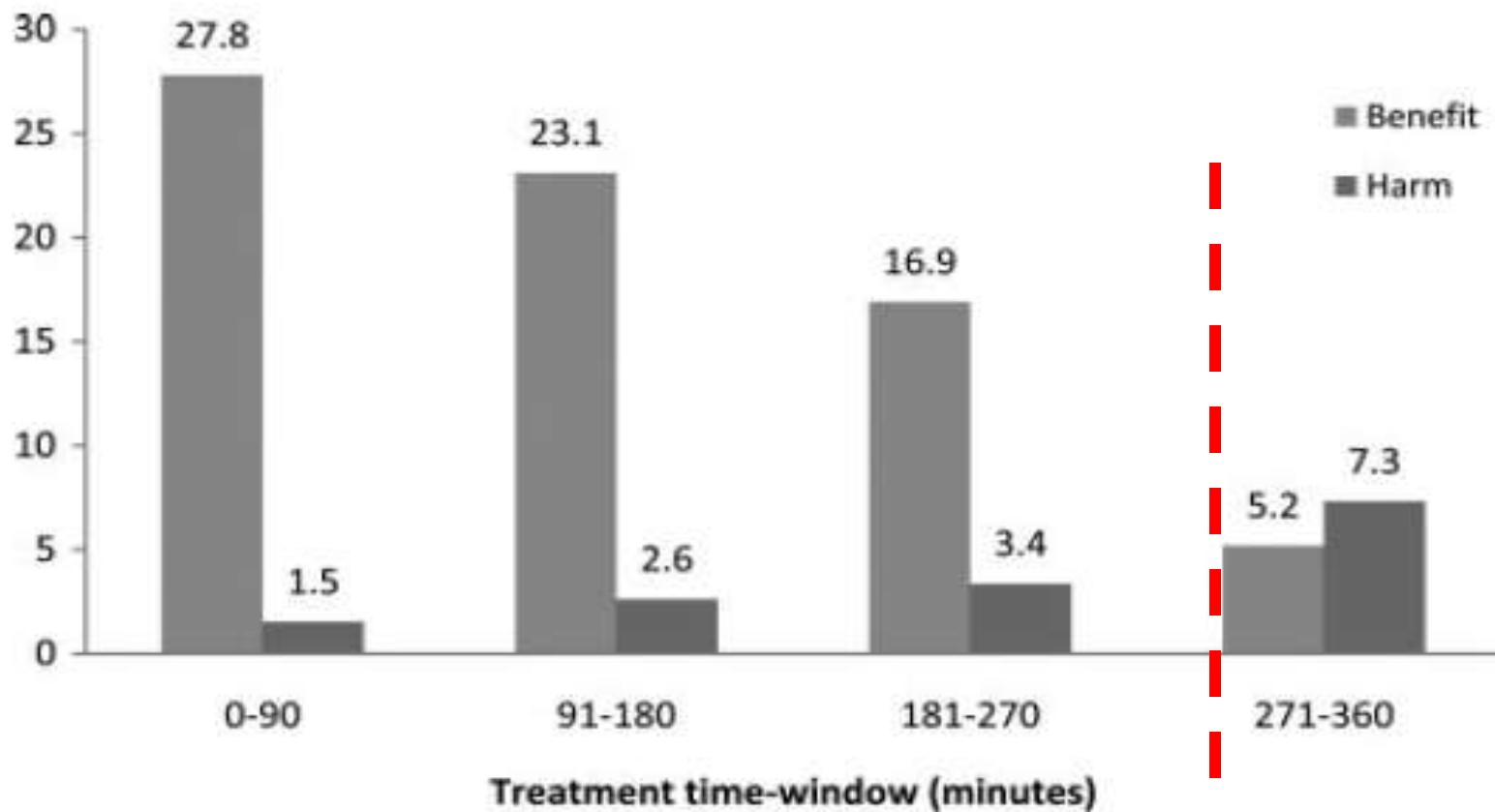


Figure. Number of patients who benefit and are harmed per 100 patients treated in each time window.

2 million neurons die every minute after symptom onset

FOOD · GAS · SHOPS · BEACHES



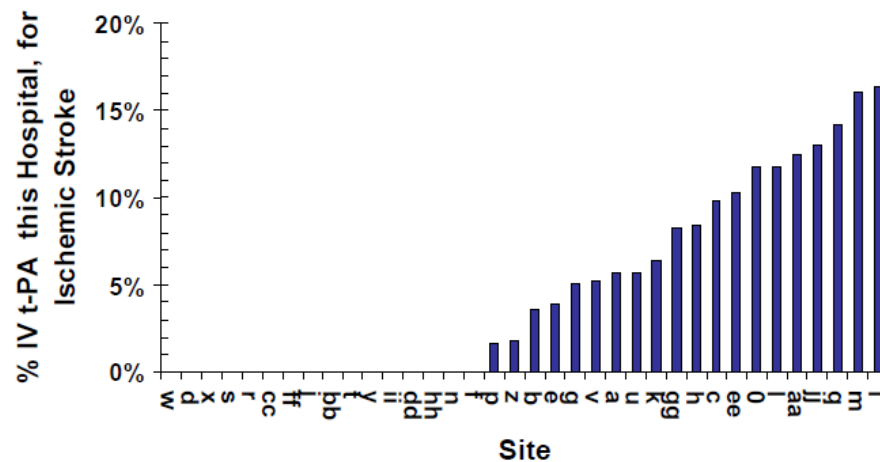
DOH Stroke Survey

- 14 hospitals
- None had a neurologist on-site 24/7
- 9 had access to any neurologist
- 2 hospitals had an acute stroke team
- 7 hospitals were staffed by ED physicians who were willing to give tPA without neurologist consultation

Rates of tPA Use Statewide

- In 2010, in Hawaii
 - 3,096 patients were discharged with acute ischemic stroke
 - <2% received tPA
- US national average
 - 6% received tPA
- Best regional telemedicine stroke systems
 - 20% received tPA

Variation in IV-tPA Use for Ischemic Stroke



Sep. 02, 2009 data. Complete records only. Ischemic strokes. Onset in non-hospital setting.

Not transfers. Not treated elsewhere. No IA treatment. No experimental protocol.

Hawaii Stroke Network

- Grant from DOH Neurotrauma Special Fund
 - 3 years funding for start-up and operating costs
 - Self-sustaining business model after 3 years
- Spoke and 'Virtual' Hub Model
 - Hub:
 - QMC Stroke Center & 5 stroke specialists, on call 24x7
 - 'Virtual' web based platform without geographic limits
 - 7 Spoke Sites:
 - Moloka'I, Wahiawa, Hilo
 - Others in discussion

Moloka'i General and the Hawaii Stroke Network ExamCam



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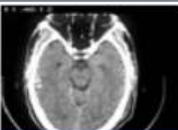



HNTN

KPACS

Grasshopper

Blogs

NIH Kid Songs



HAWAII STROKE NETWORK

Welcome **tester2!** [[Log Out](#)]

Home

About

HOW TO USE THE HSN:


1. Click "allow" at right to show your video at the remote site.
2. Click a PACS below to view images.
3. Click a Stroke Network Camera below to see the patient.


STROKE NETWORK CAMERAS

- Hilo ED Camera
- Moloka'i ED Camera
- HMC East ED Camera

Phones

- 206-407-3557
- 808-974-6848
-
-



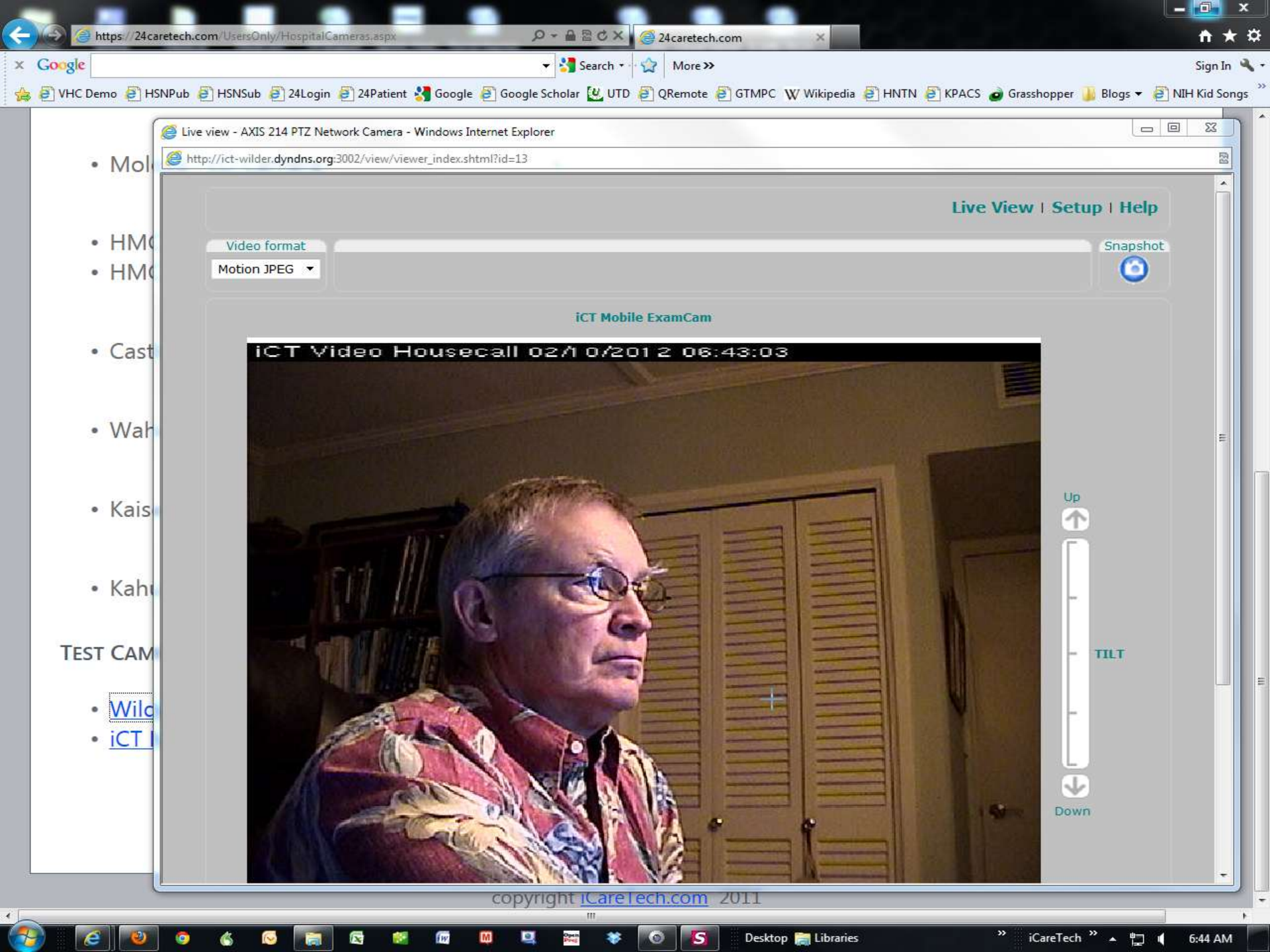


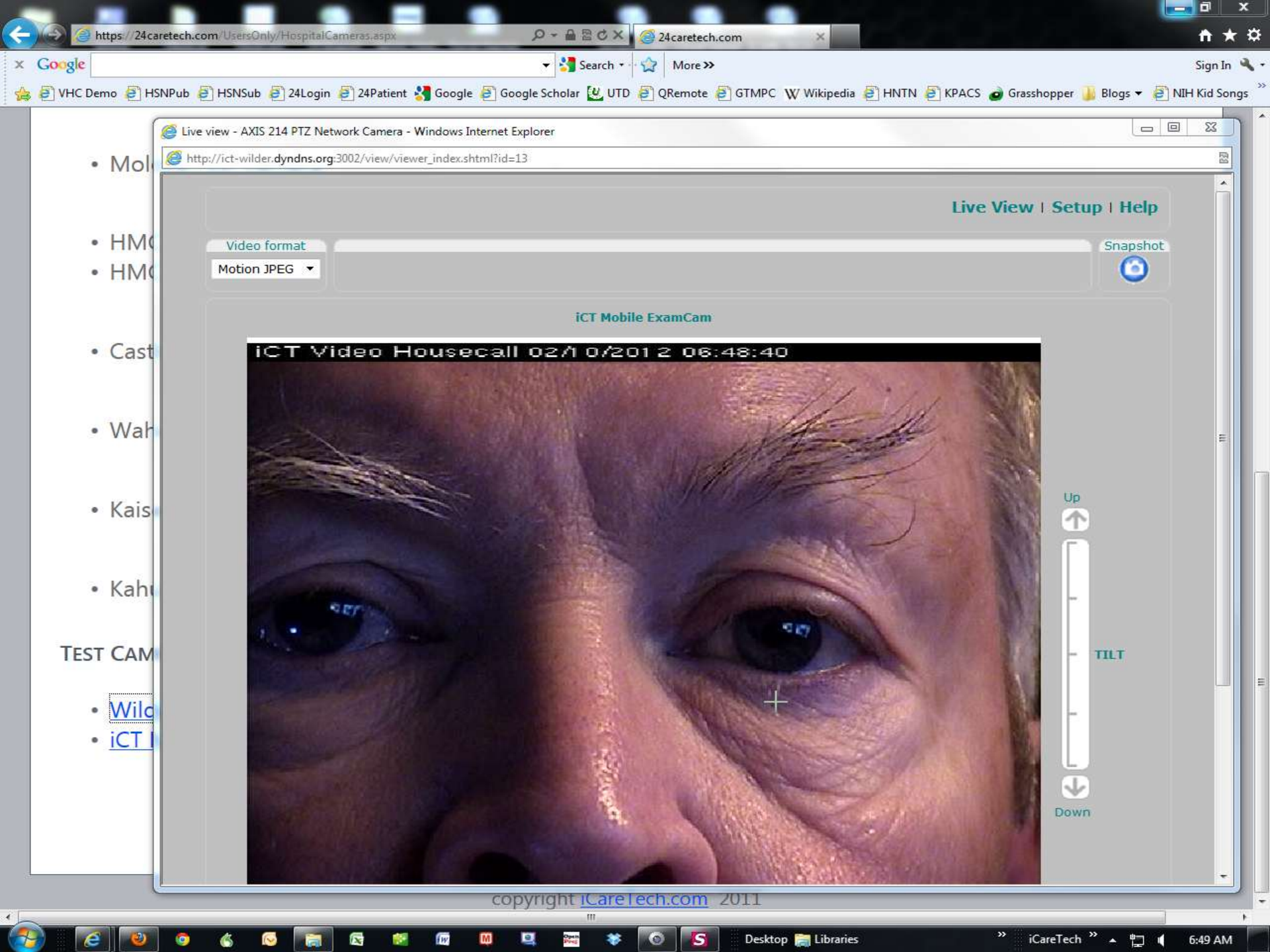
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Collaborating for Emergency Care of the Acute Stroke Patient in Hawaii: Telestroke and Triage

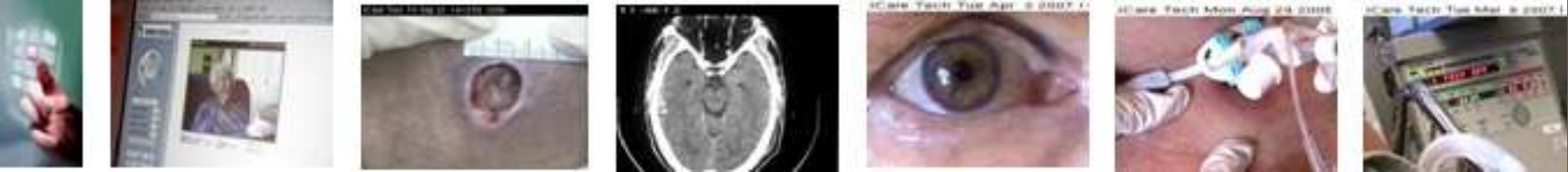


Matthew Koenig, MD

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A Case - Control study:
Reduced Hospital Days for Medically Fragile
Patients
with Telemedicine

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Background

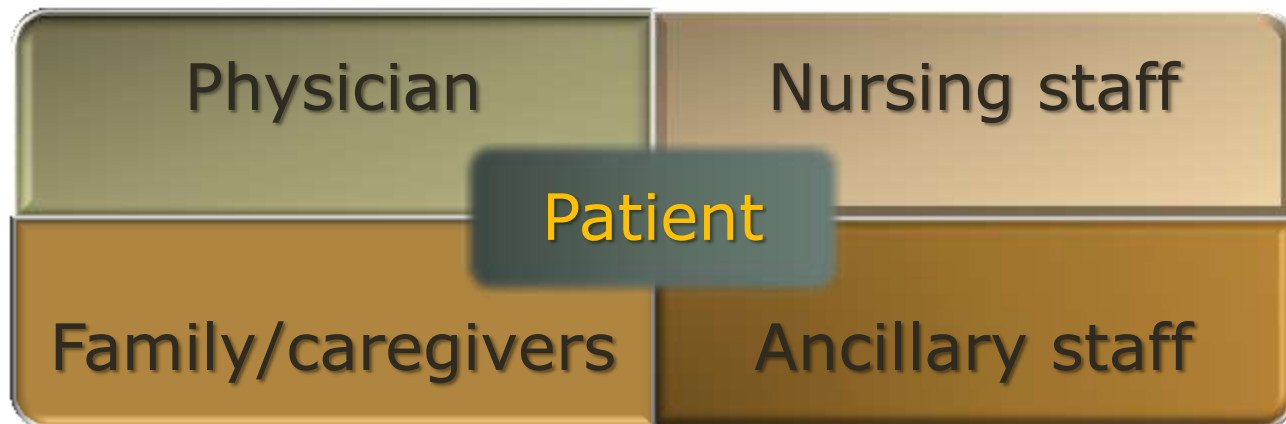
In 2005:

- 133 million people in the USA had 1 or more chronic medical conditions
- 23% of Medicare beneficiaries have 5 or more chronic conditions
- Medically Fragile-
 - Acutely Ill Forever
 - Multiple complex problems
 - Home ventilators
 - Feeding tubes, IV lines
 - Frequent, long hospitalizations

Video HouseCall



Care team model



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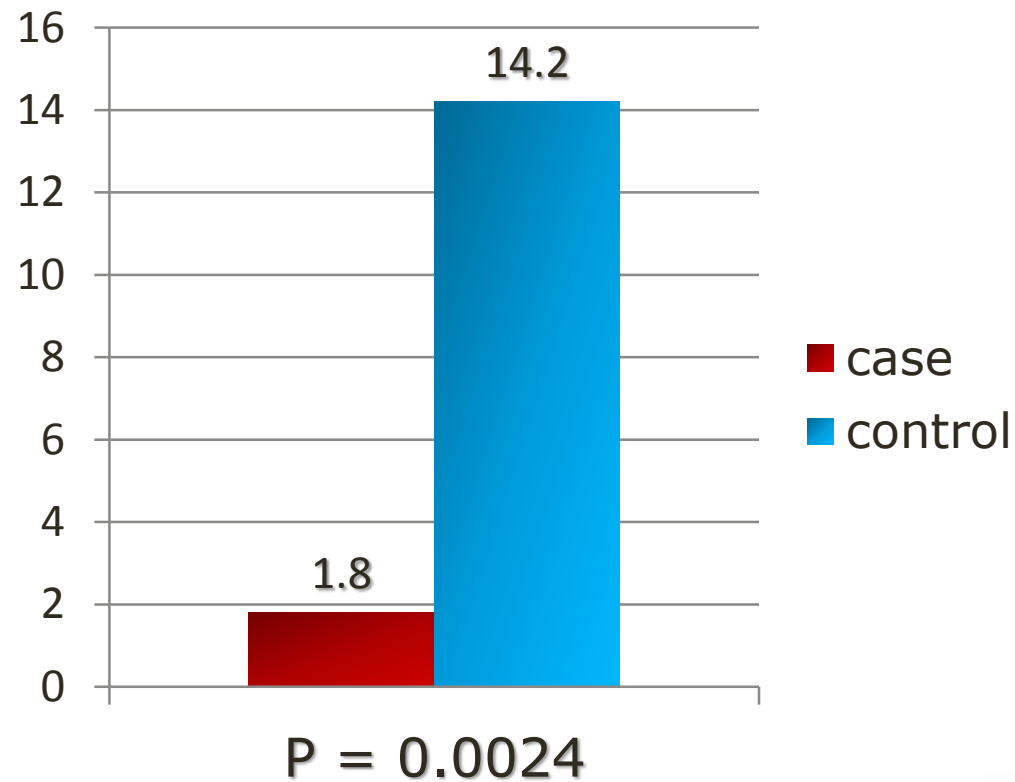


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Results

Hospital days/year



Results

Telemedicine vs Conventional Care:

- 80% Decreased Hospital days /year
- 65% Decreased Hospital admissions/year
- 85% Decreased Emergency visits/year
- Critical Factor: Access to expertise
 - 4 physician house calls/year
 - 20 video house calls/year

Stroke of Insight:

Barrier to access? Think Telemedicine

